CLAIMS

1. Pump (1) comprising at least one shield valve controlled by a conveyed medium and having a valve disk (4) of flexible material, which is clamped in a central region and is movable between an open position and a closed position, in said closed position the valve disk (4) closes at least one valve opening (9), **wherein** extensions (11) project from the valve disk (4) and/or on a valve abutment surface (10) arranged on a side thereof remote from the valve opening (9), for preventing a sudden flat abutment of the valve disk on the valve abutment surface and/or for limiting valve opening motion.

2. Pump according to claim 1, wherein the extensions (11) provided on the valve disk (4) project in step form from a peripheral edge of the valve disk (4) and act on a region of the shield valve surrounding the valve abutment surface (10).

3. Pump according to claim 1 or 2, wherein the valve disk (4) has the plurality of extensions (11) projecting generally uniformly from the peripheral edge of the disk.

4. Pump according to one of claims 1-3, wherein the valve abutment surface (10) has an approximately conical shape.

5. Pump according to one of claims 1-4, wherein a central region of the valve disk (4) is centered by a pin (7) which passes through a central perforation (8) of the valve disk (4).

6. Pump according to one of claims 1-5, wherein the valve disk (4) is connected by at least one of the step-shaped extensions (11) with a sealing ring (13) surrounding the valve disk (4), the sealing ring (13) is clamped between two housing portions (5, 6).

7. Pump according to one of claims 1-6, wherein the at least one extension (11) connecting the valve disk (4) and the sealing ring (13) extends at least sectionally transversely to the disk radius and runs in a spiral form.

8. Pump according to one of claims 1-7, wherein at least one gap (14) acting as a passage opening is provided between the sealing ring (13) and the valve disk (4).